

## In the United States Patent and Trade Mark Office

In re application of:

DANNY ADCOCK

Title:

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**EXERCISE DEVICE** 

Serial Number:

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Examiner:

LoAn H Thanh

Art Unit

3764

15 Amendment and Response to First Official Action mailed 23 January 2009 and to the advisory action dated 1 May 2009

Commissioner of Patents P.O. Box 1450

20 Alexandria VA 22313-1450

Sir,

- This amendment is in response to the office action mailed to the applicant on 1 May 25 2009.
  - A Set out below is a complete listing of the claims.
  - B The listing includes the text of all pending claims (including withdrawn claims)
  - C Each claim includes a status identifier.

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Please amend the above application as indicated below:

In the claims:

35 Claim 1-26 are cancelled from the application

Claims 27 - 53 Added

**Revised Claims**:

40 27 (Currently Amended) A device for the exercise of the musculature of the upper arm, the device comprising: telescopically assembled co operating inner and outer tubular

elements, each said tubular elements having end closure means at their outer ends; said outer tubular element including an inwardly projecting collar at its inward open end; said inner tubular element provided with an outwardly projecting collar at its inward open end; said collars co operating to prevent the withdrawal of said inner tubular element from said outer tubular element when said tubular elements operate telescopically; said device moveable between a first state in which the telescopic elements are fully extended and a second state in which the telescopic elements are compressible against a bias inside the device to provide a resistance force to rotational movement about the elbow of a forearm in a direction towards an upper arm of the same arm; wherein the device is of a length which allows engagement of one end with a hand of a user and the other end with an upper part of the same arm such that the user can exercise one arm by urging the hand against the upper arm without use of the other arm [.]; wherein said rotational movement extends between the limits of approximately an angle of 90 degrees formed by the forearm and upper arm and a smaller angle between said forearm; said upper arm limited by contact between said forearm and said upper arm and wherein the bias is a compression spring which naturally biases the telescopic elements to their maximum relative extent [.]; wherein, ends of said spring act against said closure means to provide the bias to maximum extent [.]; said maximum extended position is limited by contact between said collars [.]; said end closure means of said outer tubular member [comprises] comprising an end cap having a threaded sleeve section which mates with a threaded portion at the end of said tubular element and which [.] is removeable to allow access to an interior passage in said device which receives the spring [.]; wherein, the level of force resistance exerted by the device can be adjusted by substituting one biasing spring with another of a different compression resistance [.]; wherein, said end closure means of said inner tubular member is provided with a threaded portion adapted to mate with an external thread on the outside of said inner tubular element; said threaded portion providing adjustment means to enable variation of length between said end closure means [.]; said end closure means of said inner tubular member including a threaded socket; said socket adapted for the attachment of a resilient support pad adapted to fit against the shoulder or hand of a user [.]; said end closure means at the outward end of said outer

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tubular element is provided with a piston rod extending from said end closure means substantially the length of said outer tubular member.

## Claims 28 – 37 are cancelled

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- 38 (Currently amended) A device according to claim 27 wherein said piston rod terminates in a piston adapted for sliding in said inner tubular member.
- 39 (amended) A device according to claim38 wherein the piston provides sealing of
   10 said telescopic elements.
  - 40 (amended) A device according to claim 39 wherein the compression spring is installed between said end cap and the inwardly projecting collar of said inner tubular member.

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- 41 (amended) A device according to claim 40 wherein, said inner tubular member includes an air flow control valve positioned at said outward end of said inner tubular member.
- 20 42 (amended) A device according to claim 41 wherein, said air control valve is adapted to variably restrict the rate of air flow from said inner tubular member when said piston is driven towards said outward end of said tubular member.
- 43 (amended) A device according to claim 42 wherein said end closure means are provided with resilient pads.
  - 44 (amended) A device according to claim 43 wherein one of said end closure means is provided with strapping to secure the device to the wrist of a user.

- 45 (amended) A device according to claim 44 wherein the overall length of said device when said outer and said inner tubular members are in a fully extended position is within in the range of 130 to 180 mm.
- 5 46 (amended) A device according to claim 45 wherein said compression spring acts on a piston and piston rod coaxial with said tubular member so as to urge said piston and said piston rod into a maximum extended position.
- 47 (amended) A device according to claim 46 wherein an installed length of said
  10 compression spring is adjustable so as to vary a compressive force exerted by said spring
  on said piston and said piston rod; wherein said installed length is the length of said
  spring when said piston and said piston rod are in said maximum extended position.
- 48 (amended) A device according to claim 47 wherein said tubular member is
  15 provided with a shoulder yoke, to support said device at the shoulder of a user; and a
  wrist yoke at an outer end of said piston rod to provide support for said device at the wrist
  of said user.
- 49 (amended) A device according to claim 48 wherein said shoulder yoke is provided
   20 with adjustment means adapted to vary the distance between said shoulder yoke and said wrist yoke.
  - 50 (amended) A device according to claim 49 wherein, said wrist yoke is provided with strapping means adapted to secure said yoke to the wrist of a user.
  - 51 (amended) A device according to claim 50 wherein spring compression loadings required to compress the spring are in the range of 11 to 15 lb per inch of compression.

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52 (amended) A device according to claim 50 wherein spring compression loadings
 30 required to compress the spring are in the range of 17 to 21 lb per inch of compression.

(amended) A method for the exercise of the musculature of the upper arm, using a device comprising: telescopically assembled co operating inner and outer tubular

elements, each said tubular elements having end closure means at their outer ends;

said outer tubular element including an inwardly projecting collar at its inward open end;

said inner tubular element provided with an outwardly projecting collar at its inward open

end; said collars co operating to prevent the withdrawal of said inner tubular element

from said outer tubular element when said tubular elements operate telescopically; said

method comprising including the steps of; (a) exerting an axial load on the device to

induce compression in the device; such that the device resists rotational movement of a

forearm towards an upper arm of the same arm, said resistance force acting along the line

between the shoulder and the wrist of a user;

(b) relaxing said axial load on said device so that said device restricts the angle at the

elbow of said user to an angle about or less than 90 degrees;

(c) adjusting said device so that the resistance force is within the capacity of the user to

overcome by the rotational movement of the forearm towards the upper arm; said

adjustment being effected by means of springs of varying spring rate or by means of

varying the installed length of a compression spring;

(d) repeated reciprocal rotational movements of the forearm towards the upper arm to

exercise the arm of the user.

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In view of the forgoing the applicant believes that the claims as amended are in condition

for allowance.

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Respectfully Submitted.

DANNY ADCOCK